

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A process for producing a metal-ceramic substrate comprising a ceramic layer and a structured metal layer with conductive tracks and contact surfaces on at least one surface side of the ceramic layer and a at least one brazing resist coating applied to the structured ~~structured~~ metal layer, the process comprising the following steps:

a) applying at least one metal ~~foil~~ layer to at least one surface side of the ceramic layer by high temperature bonding at a bonding process temperature higher than 650°C for forming at least one metal layer on the ceramic layer,

b) structuring the at least one metal layer on at least one surface side of the ceramic layer for forming the structured metal layer with conductive tracks and contact surfaces,

c) applying the at least one brazing resist coating to the structured metal layer, the at least one brazing resist coating having a thickness of between 0.5 and 100 microns and

d) after applying the at least one brazing resist coating to the structured metal layer, removing some metal from the structured metal layer in an amount of 0.1-20 microns at least in surface areas bordering the brazing resist coating, and

e) leaving the at least one brazing resist coating on the structured metal layer.

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2. (Cancelled)

3. (Currently Amended) ~~A~~ The process as claimed in claim 1, wherein high temperature bonding is a direct bonding process or an active brazing process.

4. (Cancelled)

5. (Currently Amended) ~~A~~ The process as claimed in claim 1, wherein the at least one brazing resist coating is applied before structuring.

6. (Cancelled)

7. (Currently Amended) ~~A~~ The process as claimed in claim 1, wherein the at least one metal foils are layer is at least one copper foils foil and they are at least one copper foil is provided on the ceramic substrate by means of ~~the DCB~~ a direct copper bonding process or the an active brazing process.

8. (Currently Amended) ~~A~~ The process as claimed in claim 1, wherein structuring of the at least one metal foil layer takes place by means of a masking-etching process

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and wherein the at least one coating of brazing resist is applied immediately after this structuring.

9. (Currently Amended) A The process as claimed in claim 1, wherein structuring of the at least one metal ~~foil~~ layer takes place by means of a masking-etching process using an etching resist and wherein the at least one coating of brazing resist is applied immediately before application of the etching resist.

10. (Cancelled)

11. (Currently Amended) A The process as claimed in claim 1, wherein ~~removal~~ the removing some metal from the structural metal layer takes place by etching, using hydrogen peroxide, sodium persulfate, copper chloride or iron chloride.

12. (Cancelled)

13. (Currently Amended) A The process as claimed in claim 1, wherein before the application of at least one brazing resist coating, cleaning ~~of the~~ metal surfaces of the structured metal layer[[,]] by removing a surface area of the metal coatings takes place.

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14. (Currently Amended) ~~A~~ The process as claimed in claim 13, wherein cleaning takes place by chemical removal, ~~or~~ by plasma etching, ~~or~~ by electrical etching, ~~or~~ galvanic removal, ~~or~~ by mechanical working, by brushing or grinding.

15. (Currently Amended) ~~A~~ The process as claimed in claim 14, wherein chemical ~~cleaning~~ removal takes place using a hydrogen peroxide solution or a sodium persulfate solution.

16. (Currently Amended) ~~A~~ The process as claimed claim 1, wherein a surface metal coating is applied to at least one surface area of the at least one metal coating, which area is produced by removal and adjoins at least one brazing resist coating.

17. (Currently Amended) ~~A~~ The process as claimed in claim 16, wherein the surface metal coating is applied such that the surface which has been formed by this surface metal coating is lower than, level or roughly level with or projects over ~~the~~ a surface of ~~the~~ the at least one brazing resist coating or lower than, level or roughly level with or projects over ~~the~~ an untreated surface underneath the at least one brazing resist coating.

18.-19. (Cancelled)

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20. (Currently Amended) A The process as claimed in claim 1, wherein an epoxide-based coating is used for the brazing resist coating and wherein the brazing resist coating cures thermally.

21. (Cancelled)

22. (Currently Amended) A The process as claimed in claim 1, wherein the at least one brazing resist coating is structured in an area for forming an optically readable code.

23. (Cancelled)

24. (Currently Amended) A process for producing a metal-ceramic substrate comprising a ceramic layer and a structured metal layer forming conductive tracks and contact surfaces on at least one surface side of the ceramic layer, and at least one brazing resist coating applied to the structured metal layer, the process comprising the following steps:

a) applying at least one metal ~~foil~~ layer to at least one surface side of the ceramic layer by high temperature bonding at a bonding process temperature higher than 650°C for forming at least one metal layer on the ceramic layer,

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b) structuring the at least one metal layer to form the structured metal layer on the at least one surface side of the ceramic layer by applying a mask of a photo resist or edging resist to a surface side of the structured metal layer opposite to the ceramic layer and by subsequent edging away areas of the structured metal layer which are not covered by the mask of the photo resist or edging resists for forming a the structured metal layer with the conductive tracks and contact surfaces,

c) removing the mask of photo resist or edging resists and applying the at least one brazing resist coating to the structured metal layer, the at least one brazing resist coating having a thickness between 0.5 and 100 microns,

d) after applying the at least one brazing resist coating to the structured metal layer removing some metal from the structured metal layer in an amount of 0.1 – 20 microns at least in surface areas of the structured metal layer bordering the at least one brazing resist coating on the surface side opposite to the ceramic layer, and

e) leaving the at least one brazing resist coating on the structured metal layer.

25. (Cancelled)

26. (Currently Amended) ~~The~~ A process for producing a metal-ceramic substrate comprising a ceramic layer and a structured metal layer forming conductive tracks and contact

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surfaces on at least one surface side of the ceramic layer, and a brazing resist coating applied to the structured metal layer, the process comprising the following steps:

a) applying at least one metal ~~foil~~ layer to at least one surface side of the ceramic layer by high temperature bonding at a bonding process temperature higher than 650°C for forming at least one metal layer on the ceramic layer,

b) structuring the at least one metal layer to form the structured metal layer on the at least one surface side of the ceramic layer by applying a mask of a photo resist or edging resist to a surface side of the structured metal layer opposite to the ceramic layer and by subsequent edging away areas of the structured metal layer which are not covered by the mask of the photo resist or edging resists for forming a the structured metal layer with the conductive tracks and contact surfaces,

c) removing the mask of photo resist or edging resists and applying the ~~at least one~~ brazing resist coating to the structured metal layer with a thickness of 0.5 to 100 microns ~~such~~, such that it extends in a strip like manner along edges of the contact tracks and contact surfaces,

d) after applying the brazing resist coating to the structured ~~copper~~ metal layer removing some metal from the structured metal layer in an amount of 0.1 – 20 microns at least in surface areas of the structured metal layer bordering the brazing resist coating on the surface side opposite to the ceramic layer, and

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e) leaving the brazing resist coating on the structured metal layer.

27. (Currently Amended) The process for producing a metal-ceramic substrate as claimed in Claim 26 further comprising the step of:

f) applying a surface metal coating to at least one surface area of the ~~at least one~~ structured metal layer, the at least one surface area is produced by removing some metal from the structured metal layer and the at least one surface area adjoins the ~~at least one~~ brazing resist coating.

28. (Currently Amended) The process for producing a metal-ceramic substrate as claimed in Claim 26 27 further comprising the step of:

g) applying a surface metal coating to at least one surface area of the ~~at least one~~ structured metal layer, the area is produced by removing some metal from the structured metal layer and the at least one surface area adjoins the ~~at least one~~ brazing resist coating.